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# LOW MOLECULAR WEIGHT HEPARIN

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## Introduction

Low molecular weight heparins are now licensed drugs in several European countries, and they are being increasingly used in the prophylaxis and treatment of venous thromboembolism, as well as in other disease states. The authors have been closely involved in the development of low molecular weight heparin over the past 15 years or so, particularly in relation to studying aspects of the biochemistry and standardisation of the drug, as well as in animal and human pharmacology studies. It has therefore seemed timely to bring together in a monograph the main aspects of this improved version of a drug that has long been a mainstay of anticoagulant and antithrombotic therapy, namely conventional, or unfractionated, heparin. While we have endeavoured to be reasonably comprehensive in our review of the field, we have not hesitated to emphasise the more important studies that have been carried out, and to give a personal viewpoint in areas where there has been disagreement. We have attempted to summarise the current position of low molecular weight heparin as an antithrombotic agent, acknowledging its undoubted advantages, but without endorsing some of the more extravagant claims that have been made.

This book brings together in one place the main elements of the history of low molecular weight heparin, from its early use in human volunteers, through extensive collaborative studies to establish an international standard for measuring activity, to the more recent large-scale clinical trials establishing safety and efficacy. The story is by no means complete, and much further work remains to be done. However, it is already clear that low molecular weight heparin represents a very significant addition to the list of effective drugs used for the prevention and treatment of thrombosis and related conditions.

TWB EAJ DPT

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